

UNITED STATES PATENT AND TRADEMARK OFFICE



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/603,653	06/26/2003	Bo Carlstrom	024445-354	4028
55694 7	590 02/23/2006		EXAM	INER
DRINKER BIDDLE & REATH (DC)			GAY, JENNIFER HAWKINS	
1500 K STREET, N.W. SUITE 1100 WASHINGTON, DC 20005-1209			ART UNIT	PAPER NUMBER
			3672	

DATE MAILED: 02/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/603,653	CARLSTROM ET AL.				
Office Action Summary	Examiner	Art Unit				
	Jennifer H. Gay	3672				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
 Responsive to communication(s) filed on <u>06 February 2006</u>. This action is FINAL. 2b) This action is non-final. Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i>, 1935 C.D. 11, 453 O.G. 213. 						
Disposition of Claims						
4) Claim(s) 3-11 and 13-17 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) 3-6 and 13-17 is/are allowed. 6) Claim(s) 7-11 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9)☐ The specification is objected to by the Examiner.						
10) ☐ The drawing(s) filed on is/are: a) ☐ acco	•					
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: Certified copies of the priority documents have been received. Certified copies of the priority documents have been received in Application No Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F 6) Other:					

Application/Control Number: 10/603,653 Page 2

Art Unit: 3672

DETAILED ACTION

Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Claim Objections

1. Claim 16 is objected to because of the following informalities: as amended claim 16 recites "the abutment surface of an imaginary cylinder". While this corrects the antecedent basis problem with "the imaginary cylinder" referred to in the previous Office Action, a new problem has been created as "the abutment surface" was previously defined in the claim as part of the male element not an imaginary cylinder. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 7-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Larsson (US 4,968,068).

Regarding claim 7: Larsson discloses a drill rod for percussive rock drilling (the examiner notes that Larsson does not teach that the below features are part of a drill bit but the coupling disclosed therein is considered capable of being used or part of a drill bit). The drill rod includes the following features:

- A central recess (Figure 1) having an internal thread 17 provided along a portion of the recess.
- An abutment surface 20 at an inner end of the recess.
- A length L' defined from the abutment surface to a point where an imaginary coaxial circular cylinder ceases to contact a crest of the thread. The quotient of L' divided by the diameter Di of the imaginary

Application/Control Number: 10/603,653

Page 3

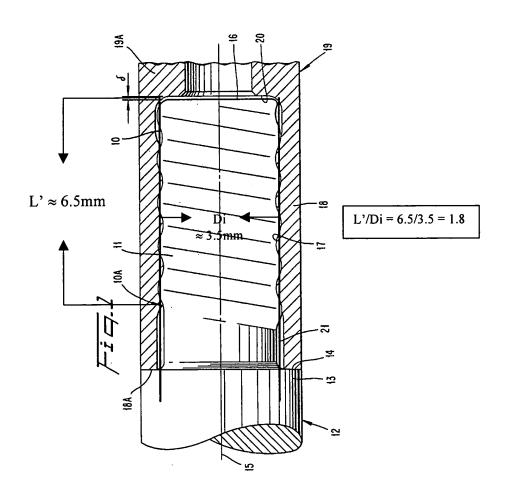
Art Unit: 3672

cylinder is within the range of 1-2 (see included figure). (The examiner recognizes that Larsson neither specifically teaches or shows this feature but notes that a measurement of Figure 1 shows that L' can be taken to be approximately 6.5 mm and Di can be taken to be approximately 3.5 mm. While drawings cannot be considered to scale, the ratio of the dimension of two parts is considered to be a value that will not change when the scale of the figures is.)

Regarding claims 8, 10: The quotient is approximately 1.8, which is considered to encompass 1.6.

Regarding claim 9: Di is less than 36 mm.

Regarding claim 11: The drill rod is connectable to other drill rods and includes a flow passage (Figure 1).



Allowable Subject Matter

4. Claims 3-6 and 13-17 are allowed.

Response to Arguments

- 5. Applicant's arguments with respect to claims 7-11 have been considered but are moot in view of the new ground(s) of rejection.
- 6. Applicant's arguments filed February 6th, 2006, with respect to claims 3-6 and 13-17 have been fully considered and are persuasive. The art rejection of those claims has been withdrawn.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer H. Gay whose telephone number is (571) 272-7029. The examiner can normally be reached on Monday-Thursday, 6:30-4:00 and Friday, 6:30-1:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on (571) 272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jennifer H Gay Primary Examiner Art Unit 3672

JHG K February 15, 2006